

WHAT IS CLAIMED IS:

- 1 1. A wrench for turning lock nuts of the type having a series of protrusions on an  
2 outer periphery thereof with spaces between the protrusions, comprising:
  - 3 a) an elongate handle shaft section having a first side and a second side;
  - 4 b) a first transition section extending at a first acute angle from the first side  
5 of the handle shaft as measured from an imaginary line extending the  
6 handle shaft on the first side, and for a first offset distance normal to the  
7 handle shaft, and a second transition section extending at a second acute  
8 angle from the second side of the handle shaft as measured from an  
9 imaginary line extending the handle shaft on the second side and for a  
10 second offset distance normal to the second side of the handle shaft;
  - 11 c) a first arc shaped head extending from the first transition section at a  
12 location near an end of the first arc shaped head, and a second arc shaped  
13 head extending from the second transition section at a location near an end  
14 of the second arc shaped head; and
  - 15 d) at least two tabs extending from the first arc shaped head and at least two  
16 tabs extending from the second arc shaped head; wherein each arc shaped  
17 head is adapted to fit over a lock nut with each of the at least two tabs  
18 thereon fitting in a space between two protrusions on the lock nut.
- 1 2. The wrench of claim 1, wherein the two transition sections are integral with the  
2 elongate handle shaft.
- 1 3. The wrench of claim 1, wherein the two transition sections are each attached to the  
2 elongate handle shaft.

- 1 4. The wrench of claim 1, wherein the first arc shaped head and the second arc  
2 shaped head are each oriented in a direction that is approximately parallel to the  
3 elongate handle shaft.
- 1 5. The wrench of claim 4, wherein the first angle and the second angle are  
2 approximately equal in magnitude and opposite in direction.
- 1 6. The wrench of claim 5, wherein the first offset distance and the second offset  
2 distance are approximately equal in magnitude and opposite in direction.
- 1 7. The wrench of claim 6, wherein the at least two tabs on the first arc shaped head  
2 are oriented in a first direction and the at least two tabs on the second arc shaped  
3 head are oriented in a second direction opposite to the first direction.
- 1 8. The wrench of claim 7, wherein first direction and the second direction are  
2 approximately perpendicular to the elongate handle shaft.
- 1 9. The wrench of claim 8 wherein the first arc shaped head and the second arc shaped  
2 head are in the form of a circular arc.
- 1 10. The wrench of claim 8 wherein the arcs are in the form of a semicircle.
- 1 11. The wrench of claim 6, wherein the magnitude of the offset distance is in the range  
2 between about 0.25 inch and about 1.0 inches.
- 1 12. The wrench of claim 6, wherein the magnitude of the acute angle is in the range  
2 between about  $15^{\circ}$  and about  $30^{\circ}$ .
- 1 13. The wrench of claim 8, wherein the at least two tabs extending from each arc  
2 shaped head comprise four tabs extending from each head.

- 1 14. A method of manipulating a lock nut of the type having a series of protrusions on  
2 an outer periphery thereof with spaces between the protrusions, at a position in an  
3 electrical box of the type having access to the interior through a front panel,  
4 comprising the acts of:
- 5 a) using a wrench comprising
    - 6 i) an elongate handle shaft section having a first side and a second  
7 side;
    - 8 ii) a first transition section extending at a first acute angle from the  
9 first side of the handle shaft as measured from an imaginary line  
10 extending the handle shaft on the first side, and for a first offset  
11 distance normal to the handle shaft , and a second transition section  
12 extending at a second acute angle from the second side of the  
13 handle shaft as measured from an imaginary line extending the  
14 handle shaft on the second side and for a second offset distance  
15 normal to the second side of the handle shaft;
    - 16 iii) a first arc shaped head extending from the first transition section at  
17 a location near an end of the first arc shaped head, and a second arc  
18 shaped head extending from the second transition section at a  
19 location near an end of the second arc shaped head; and
    - 20 iv) at least two tabs extending from the first arc shaped head and at  
21 least two tabs extending from the second arc shaped head; wherein  
22 each arc shaped head is adapted to fit over a lock nut with each of  
23 the at least two tabs thereon fitting in a space between two  
24 protrusions on the lock nut.
  - 25 b) choosing the more convenient arc shaped head to reach the position of the  
26 lock nut;
  - 27 c) engaging the more convenient arc shaped head with the lock nut such that  
28 the at least two tabs extending therefrom intermesh with spaces between  
29 protrusions in the lock nut; and
  - 30 d) turning the wrench to manipulate the lock nut.

1    15.    The method of claim 14, wherein the lock nut is blocked from direct access  
2           through the front panel, and the act of engaging further comprises engaging the  
3           more convenient arc shaped head on a sector of the lock nut which faces an edge  
4           of the electrical box.